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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/565,139	01/19/2006	Sachin Satish Mody	PU030222	9016

24498 7590 09/09/2009

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EXAMINER	
HUYNH, NAM TRUNG	
ART UNIT	PAPER NUMBER
2617	

MAIL DATE	DELIVERY MODE
09/09/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/565,139	MODY ET AL.	
	Examiner	Art Unit	
	NAM HUYNH	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *02 June 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *22-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *22-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

This office action is in response to amendment filed on 6/2/09. Of the previously presented claims 22-38; claims 22 and 33 have been amended.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. The factual inquiries set forth in *Graham* **v.** *John Deere Co.,* 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

3. Claims 22-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pruss et al. (uS 2004/0193513) (hereinafter Pruss) in view of Sorber et al. (US 2003/0157925) (hereinafter Sorber).

Regarding claim 22, Pruss teaches a method for processing user requests for credit based network access, said method comprising:

receiving a user request for user access according to an authentication protocol (paragraphs 85, 86; SSG receives request message from mobile station);

forwarding user credentials in response to said user request (paragraph 89; SSG forwards the access request to an AAA server);

receiving an access response authenticating said credit-based network access, said access response containing a parameter having a credit value indicative of a length of available continued network access based on remaining user credit (paragraphs 76, 105; AAA server decides how long a mobile station is authorized to access a service based on a balance or quota);

a user transmitting a re-authentication request (user selects Refill Credit Balance button on Dashboard) in response to said credit parameter value reaching a threshold value (credit has exhausted or gone below a threshold) to cause a re-authentication to occur (connection is re-authorized after user replenishes credit) (paragraphs 188191, 192); and

receiving and forwarding data before granting further access to the network by said client device (paragraphs 191, 192; when a user desires to refill credit an exchange of data is conducted between the user and the Billing Server before re-authorization occurs).

However, Pruss does not explicitly teach that user credentials are received and forwarded before granting further access to the network during the re-authentication request. Sorber discloses a communication unit and method for facilitating prepaid communication services (title). Sorber teaches that a user may provide a credit card or

bank account number (user credentials) to be used for replenishment of a prepaid account (paragraph 18). Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the invention of Pruss to allow a user to provide and send user credentials, as taught by Sorber, to the Billing Server when refilling credit in order to add convenience to a user by allowing credit to be replenished without having to purchase a new prepaid card or calling an operator.

Regarding claims 23, 27, and 36, Pruss teaches parameter comprises a session-timeout parameter associated with IEEE 802.1X authentication protocol (paragraph 125; session timer).

Regarding claim 24, Pruss teaches receiving a re- authentication response for re-establishing said network access based on said credit parameter value (paragraph 142; SSG receives quota information from the billing server).

Regarding claim 25, Pruss teaches the re-authentication response is based on the results of a comparison of said credit parameter value with said threshold value (paragraph 142; threshold value).

Regarding claims 26, 29, Pruss teaches said credit parameter value contained in said access response is based on one of: a) time usage; and b) traffic volume usage (paragraph 105).

Regarding claim 28, Pruss teaches said authentication server is a RADIUS authentication server, and further wherein said authentication server contains memory for storing said indicator of remaining user credit (paragraph 55; AAA server).

Regarding claim 30, Pruss teaches in response to said re-authentication process, said authentication server retrieves said indicator of remaining user credit and denies re-authentication of said client device when said indicator of remaining user credit drops below a threshold value (paragraph 142, connection is disconnected).

Regarding claim 31, Pruss teaches the indicator of remaining user credit comprises a credit timer indicative of the remaining credit balance, said credit timer being decremented according to a temporal access usage (paragraph 152).

Regarding claim 32, Pruss teaches the authentication server periodically updates the credit timer in units of: a) time and b) traffic volume (paragraphs 68, 69).

Regarding claim 33, the combination of Pruss and Sorber teaches a method for processing user requests for credit based network access, said method comprising:

receiving user credentials associated with said user request for credit based network access (Sorber paragraph 12; user of MS has funded a prepaid account);

calculating, in response to said user credentials, a session-timeout parameter value based on remaining user credit and network charges, said session-timeout parameter value indicative of a length of available continued network access (Pruss paragraphs 125, 126; SSG calculates quota value or the time or volume a user is permitted to use service);

embedding said session-timeout parameter value (quota) in an access response message (Access-Accept message) authenticating said credit based network access (Pruss paragraphs 126, 128);

activating a credit timer having a value indicative of remaining user credit balance, said credit timer decremented according to a temporal access usage (Pruss paragraph 125; SSG server monitors usage of services);

forwarding said access response message (Pruss paragraph 123; Access-Accept message is forwarded by the AAA server);

receiving said user credentials from a user in response to a re-authentication request for re- authenticating said credit based network access (Sorber paragraph 18);

comparing said credit timer value with a predetermined threshold value; and determining whether said network access is de-authenticated (connection is terminated) from further network access based on said comparison (Pruss paragraphs 133, 134; if unsuccessful re-authorization is indicated the connection is terminated).

Regarding claim 34, Pruss teaches transmitting a re-authentication response message when said credit timer value is above said predetermined threshold value (paragraph 142).

Regarding claim 35, Pruss teaches transmitting a re-authentication response message when said credit timer value is below said predetermined threshold value (paragraph 142).

Regarding claim 37, the combination of Pruss and Sorber teaches a system for processing user requests for credit based network access, comprising an access point associated with a network (Pruss paragraph 53; SSG/GGSN), said access point providing said credit based network access based on authentication according to an authentication protocol (Pruss paragraph 55; AAA Server performs authentication for

SSG/GGSN), and wherein said access point is responsive to an access response message (Access Accept message) containing a parameter having a value indicative of remaining user credit (quota) (Pruss paragraph 123, 125; quota is received by the SSG from the AAA server), so as to cause said access point to initiate a re-authentication process upon expiration of a timer corresponding to said parameter value (Pruss paragraphs 188, 191, 192; re-authentication is performed when credit has exhausted) by requiring a user associated with a client device to re-provide user credentials (Sorber paragraph 18) to permit re-authentication before one of granting and denying further credit based network access (Pruss paragraph 192; in the combination of Pruss and Sorber the user is re-authenticated after a user provides credentials for refilling credit).

Regarding claim 38 the combination of Pruss and Sorber teaches a system for processing user requests for credit based network access, comprising an authentication server (Pruss paragraph 55; AAA Server), said authentication server being responsive to an access request message (paragraph 84; AAA server receives Access-Request messages) containing user credentials (Sorber paragraph 18) and wherein said authentication server transmits an access response message (Pruss paragraph 123; Access-Accept message) containing a parameter (quota) having a value indicative of a length available continued network access based on an indicator of remaining user credit (Pruss paragraph 126) so as to cause initiation of a re-authentication process upon expiration of a timer corresponding to said parameter value (Pruss paragraphs 188, 189; system initiates refilling when credit has exhausted) by requiring a user with a client device to re-provide user credentials (Sorber paragraph 18) to permit re-

authentication before one of granting and denying further credit based network access (Pruss paragraphs 191, 192; the user is not reauthorized for services until replenishing credit).

Response to Arguments

4. Applicant's arguments with respect to claims 22 and 38 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NAM HUYNH whose telephone number is (571)272-5970. The examiner can normally be reached on 8 a.m.-5 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/
Supervisory Patent Examiner, Art Unit 2617

/Nam Huynh/
Examiner, Art Unit 2617